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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,374	02/21/2002	Hirofumi Tsutsumi	NIP-257	5014

7590

10/03/2005

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EXAMINER

TRIEU, VAN THANH

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/078,374

Applicant(s)

TSUTSUMI ET AL.

Examiner

Van T. Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/3/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## ***DETAILED ACTION***

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "**means**" and "**said**," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

1. The abstract of the disclosure is objected to because there are phrases "**means**" and number '1' in the abstract. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 5, 7-9, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by **Sandridge et al** [US 4,795,253].

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Regarding claim 1, the claimed a security terminal system, comprising sampling means for sampling gases including the ambient air around a target object to be inspected (the computer 18 control a detector device for continuously monitoring and/or sampling the atmosphere of a selected area for the presence of any toxic/hazardous gaseous material, see Fig. 1, col. 1, lines 11-17, col. 3, lines 56-64 and col. 4, lines 34-37); and the mass spectrometric means for analyzing the mass of the target gas to be inspected, which has been sampled by the sampling means (the FTIR spectrometer or the spectrometric, see col. 4, lines 34-49); and the communication means for sending and receiving information via a communication line (the communication means in a large area, a central computer is communicated with the local computer 18 or directly with the detector over the telephone line and modem, see col. 4, lines 55-58 and col. 10, lines 60-64); and the display means for displaying information (the monitor or video display for displaying of determined toxic gases to be identified or recognized by any person or human observer, see col. 4, lines 1-25, 42-44 and col. 11, lines 51-61); and the control means for controlling the each means, wherein the control means outputs mass spectrometric data, which has been analyzed by the mass spectrometric means, to a communication line via the communication means, imports the determination result of a dangerous substance associated with the mass spectrometric data which has been received by the communication means via the communication line and then displays the result on said display means (the computer 18 includes digital processors being programmed for fast Fourier transform of the collect/sample data and to compare of the wavelength of detected IR radiation with reference wavelengths of the gases expected

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to be present in the atmosphere being monitored, and to convert and transmit the results of its analysis in graphic form, bar graph to viewing screen or monitor, see Fig. 1, col. 4, lines 34-49, col. 9, lines 56-67, col. 10, lines 1-4 and col. 11, lines 51-61).

Regarding claim 2, all the claimed subject matters are cited in respect to claim 1 above, and including the identifying the type of the substance (the result of such analysis is printed in a variety of forms and/or projected onto a video display unit to be identified or recognized by a human observer, see col. 4, lines 1-25 and col. 11, lines 51-61)

Regarding claim 4, all the claimed subject matters are cited in respect to claim 1 above, and including identifying the type of substance by collating mass spectrometric data of a mass spectrum with the reference data (the results of the spectrometric analysis available in a form understandable to the person or device monitoring the area for the presence of specified gaseous materials, see col. 4, lines 34-49).

Regarding claim 5, all the claimed subject matters are cited in respect to claim 4 above, and including the second determination means for determining whether or not a dangerous substance is present and identifying the type of the substance by collating second mass spectrometric data of the target gas with the second reference data used for the determination of the dangerous substance, which reads upon more than one detector device is employed to monitor a large area with different gases, wherein each detector device is a result of spectrometric analysis with different reference wavelength

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for determining of specified gaseous material, see col. 4, lines 34-58, col. 9, lines 56-67, col. 10, lines 1-16 and 60-64).

Regarding claim 7, all the claimed subject matters are cited in respect to claim 1 above.

Regarding claim 8, all the claimed subject matters are cited in respect to claim 5 above.

Regarding claim 9, all the claimed subject matters are cited in respect to claim 5 above.

Regarding claim 11, the method claimed limitations are met by the apparatus claim 1 above.

Regarding claim 13, the method claimed limitations are met by the apparatus claim 1 above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 3, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sandridge et al** [US 4,795,253] in view of **Wang et al** [US 6,138,082].

Regarding claim 3, all the claimed subject matters are cited in respect to claim 1 above, but **Sandridge et al** fails to disclose the X-ray device that photograph an X-ray image of the target object. However, **Sandridge et al** teaches that FTIR spectrometer is used to collect of the gaseous in the atmosphere and analyzing them along with a video camera for capturing image of the area of the detected gaseous to be displayed on the monitor or video display, see Fig. 1, col. 4, lines 1-49 and col. 11, lines 51-61. **Wang et al** suggests that the FTIR spectrometer, mass spectrometers 32 or analytical x-ray instruments are used to analyze the collected gases for displaying of the gas substance on a monitor 133, see Figs. 1-3, col. 3, lines 13-65, col. 5, lines 3-45 and col. 11, lines 6-9. Therefore, it would have been obvious to one skill in the art at the time the invention was made to substitute the analytical x-ray instrument of **Wang et al** for the FTIR spectrometer of **Sandridge et al** since either one provide analysis of detected gases and with the x-ray can incorporated with the video camera for visually identify exactly location and quantity of the monitored gases.

Regarding claim 6, all the claimed subject matters are discussed between **Sandridge et al** and **Wang et al** in respect to claims 3 and 4 above.

Regarding claim 10, all the claimed subject matters are discussed between **Sandridge et al** and **Wang et al** in respect to claims 3 and 11 above.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sandridge et al** [US 4,795,253]

Regarding claim 12, **Sandridge et al** fails to disclose the support system sends billing data for determination cost together with the determination result to the terminal system. However, **Sandridge et al** teaches that the result of the spectrometric analysis is sent to a local monitor 18 or remote central computer for observation, see Fig. 1, col. 4, lines 1-49 and col. 10, lines 60-66. Since the cost of operation of the detection device and the result analysis is eventually pay by to a customer or government for the service protection of an area, office buildings and/or public parks provided with the gaseous monitor device. Therefore, it would have been obvious to one skill in the art to recognize that the cost of monitoring and detected of specified gaseous material will be billed along with each of the result or later as a public service to protect people and the environment.

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***Conclusion***

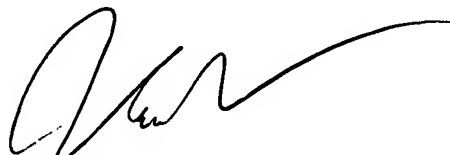
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Heath et al** discloses a process environment monitoring system to collect and test air samples from a number of different sample locations using spectrometric analysis and provides alarm indication to a user/observer. [US 5,068,798] and [US 5,452,234]

**Hunt et al** discloses a particular area or areas are monitored for the presence of gaseous materials using spectrometric analysis and interferometer. [US 4,999,498]

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.



**Van Trieu**  
**Primary Examiner**  
**Date: 9/30/05**